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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,932	03/31/2004	Osamu Ueda	C14-170999M/SAT	4907
21254	7590	05/31/2005	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			NGUYEN, HOANG V	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/812,932

Applicant(s)

UEDA, OSAMU

Examiner

Hoang V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/12/04 & 3/31/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue (US 2004/0217907 A1).

Regarding claim 1, Inoue (Figures 1-5, para. 69-72) discloses an antenna comprising a dielectric substrate 10 in which a plate thickness thereof is configured to be different at each of the regions; and a plurality of flat antenna patterns 4 and 3 provided on the each of regions of the dielectric substrate, wherein the plurality of flat antenna patterns each receives or transmits electric waves having different frequency bands respectively.

Regarding claim 2, as applied to claim 1, Figure 5 of Inoue shows that a back side of the dielectric substrate 10 is configured to be flat, the back side opposes to the side where the plurality of antenna patterns are provided, wherein the back side of the dielectric substrate comprises a grounding conductor 11.

Regarding claim 3, as applied to claim 2, Inoue (para. 74) teaches that the dielectric substrate is made of a synthetic resin material.

Regarding claim 4, as applied to claim 2, Figure 5 of Inoue shows that the regions comprise a central region defined by a single closed line; and a plurality of annular regions

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surrounding the central region and each defined by two concentric closed lines, wherein the plurality of annular regions are configured to have different heights.

Regarding claim 5, as applied to claim 2, Figure 1 of Inoue shows that the flat antenna patterns are disposed on each of the regions in order of frequency bands of the electric waves that each of the flat antenna patterns receives or transmits.

Regarding claim 6, as applied to claim 4, Figure 4 of Inoue shows that the thickness of each of the regions of the dielectric substrate are configured to increase sequentially from the central region to the annular region that is positioned outermost.

Regarding claim 8, as applied to claim 4, Figure 1 of Inoue teaches that the frequency bands of the electric waves that each of the flat antenna patterns receives and transmits are configured to increase sequentially from the frequency bands of the electric wave that flat antenna pattern disposed on the central region receives or transmits, to the frequency bands of the electric wave that the flat antenna pattern disposed on the annular region that is positioned outermost receives or transmits.

***Allowable Subject Matter***

3. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

Inoue discloses the claimed invention except that the thickness of each of the regions of the dielectric substrate are configured to decrease sequentially from the central region to the annular region that is positioned outermost.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 6,433,742 B1 discloses an antenna structure comprising a plurality of antenna elements disposed on a dielectric substrate with varying plate thickness at different regions.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V. Nguyen whose telephone number is (571) 272-1825.

The examiner can normally be reached on Mondays-Fridays from 9:00 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Nguyen can be reached on (571) 272-1825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hvn  
5/24/05



**HOANG V. NGUYEN  
PRIMARY EXAMINER**